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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,096	06/30/2003	Michael E. Weinstein	017750-584	8095
7590	03/21/2005		EXAMINER	
BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			TAN, VIBOL	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/608,096	WEINSTEIN, MICHAEL E. <span style="float: right;">8M</span>
	Examiner Vibol Tan	Art Unit 2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 February 2005.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 12-23 is/are allowed.

6) Claim(s) 1,2,4-6,8 and 9 is/are rejected.

7) Claim(s) 3,7,10 and 11 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4-6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Chan et al. (U. S. PAT. 6,201,453).

In claim 1, Chan et al. teaches all claimed features in Figs. 3-5, a microstrip-waveguide transition for transmission of electromagnetic energy comprising: a waveguide (31) having an open end (as shown); a dielectric substrate (36) attached to the open end; a microstrip probe (39) on the dielectric substrate; and means (impedance matching; col. 3, line 35) for countering a capacitive susceptance with inductive susceptance, wherein the capacitive susceptance is produced across the open end when the open end is exposed to electromagnetic energy (inherent).

In claim 2, Chan et al. further teaches the microstrip-waveguide transition according to claim 1, wherein the dielectric substrate (36) has a first side surface attached to the open end (as shown) and a second side surface on which the microstrip probe is positioned (as shown).

In claims 4 and 9 Chan et al. further teaches the microstrip-waveguide transition according to claim 2, wherein the means for countering the capacitive susceptance with inductive susceptance includes a backshort cap (34) attached to the open end; and

wherein the backshort cap is attached to the open end with a conductive adhesive (since conductive adhesive is a broad term, welding or soldering meets the claimed limitation; col. 3, line 10).

In claim 5, Chan et al. further teaches the microstrip-waveguide transition according to claim 4, wherein the backshort cap is attached to the second side surface with an adhesive (welding or soldering; col. 3, line 10) to form a hermetic seal between the backshort cap and the dielectric substrate.

In claim 8, Chang et al. further teaches the microstrip-waveguide transition according to claim 1, wherein the dielectric substrate (36) is attached to the open end with a conductive adhesive (since conductive adhesive is a broad term, soldering meets the claimed limitation).

2. Claims 3, 7, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Claims 12-23 appear to comprise allowable subject matters.

***Response to Arguments***

4. Applicant's arguments filed 2/28/2005 have been fully considered but they are not persuasive.

The applicant argues that the exit as taught by the Chan et al. patent produces an H-plane waveguide output (abstract), whereas the broad wall exit as shown in the applicant's Figs. 1 and 2 results in an E-plane probe. However, there is no recitation of

the broad wall exit as shown in the applicant's Figs. 1 and 2 results in an E-plane probe, as being claimed in claim 1.

In claim 1, the applicant further argues that the impedance of the loop conductor 38 as disclosed by the Chan et al. patent relates to "approximately 400  $\Omega$ " (col. 3, lines 30-35), which is different from the characteristic impedance of the waveguide. The Examiner respectfully disagrees because in col. 3, lines 30-35, Chang et al. teaches the impedance of the loop conductor 38 will generally be the same as the waveguide 31, as known in the art, impedance matching is required for maximum power transfer.

Regarding claims 4, 8 and 9, conductive adhesive is a broad term; thus welding or soldering meets the claimed recitation.

The rejection of claims 1, 2, 4-6, 8 and 9 is maintained.

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**VIBOL TAN**  
**PRIMARY EXAMINER**